

REMARKS

Claims 1, 6, 9-11, 13-15, 19 and 22-31 were examined by the Office, and in the final Office Action of July 29, 2010 all claims are rejected. With this response no claims are amended, added or cancelled. Applicant respectfully requests reconsideration and withdrawal of the rejections in view of the following discussion.

Claim Rejections Under § 103

In section 3, on page 4 of the Office Action, claims 1, 6, 10-11, 13-15, 19 and 22-31 are rejected under 35 U.S.C. § 103(a) as unpatentable over Chiang et al. (U.S. Patent No. 6,741,863) in view of MacDonald (U.S. Patent No. 5,732,354). Applicant respectfully submits that claim 1 is not disclosed or suggested by the cited references, alone or in combination, because the cited references fail to disclose or suggest all of the limitations recited in claim 1. The cited references at least fail to disclose or suggest measuring at least one feature of a signal transmitted between a mobile station and at least two base stations, as recited in claim 1. For at least this reason, claim 1 is not disclosed or suggested by the cited references.

In contrast to claim 1, MacDonald discloses propagation path slope resulting from different environments. While one may consider the parameter of propagation path slope to describe line-of-sight, claim 1 clearly recites that the characteristic parameter describes excess path length. However, the Office has failed to show that the parameter of propagation path describes excess path lengths. It is understood by one of skill in the art that excess path length relates to the extra distance a signal will have to take to overcome obstacles. In MacDonald, the characteristic parameter does not describe excess path lengths caused by obstacles, but signal attenuation.

In addition, the methodology for determining location in claim 1 is time based, i.e. based on measurements of time and travel differences, and so an environmental parameter indicative of extra path lengths can readily be used. However, parameters which do not describe extra path lengths but signal strength attenuation cannot obviously be used in conjunction with time/distance measurements as recited in claim 1. The raw parameter which is measured in MacDonald is signal strengths which may vary according to environment, for example though denser environments. Therefore, it is not obvious to combine MacDonald and Chiang, since there is not disclosure or suggestion as to why one of skill in the art would amend the computed distances of Chiang by a characteristic parameter which describes excess path lengths, as there is no such parameter disclosed by MacDonald. The feature in

MacDonald of effect of environment on signal strength is entirely inappropriate, has different units and therefore cannot be used make up for the deficiencies in the teachings of Chiang.

While Chiang is based on travel time and travel time difference calculations, MacDonald teaches how estimation of the location of a mobile can be made and refinements due to the line-of-sight conditions, both entirely by measuring the raw parameters of signal strength. Therefore, it would not be obvious to modify Chiang with the teachings of MacDonald, since Chiang is based on time difference measurements rather than signal strength measurements. All that is disclosed in MacDonald is that the environment affects the signal strength, but it would not be obvious to use this teaching to arrive at the limitations of claim 1.

Independent claims 15 and 23-24 contain limitations similar to those recited in claim 1, and therefore are not disclosed or suggested by the cited references for at least the reasons discussed above with respect to claim 1.

The dependent claims rejected above, all ultimately depend from the above mentioned independent claims, and therefore are not disclosed or suggested by the cited references at least in view of their dependencies.

In section 4, on page 12 of the Office Action, claim 9 is rejected under 35 U.S.C. § 103(a) as unpatentable over Chiang in view of MacDonald and Hilsenrath et al. (U.S. Patent No. 6,026,304). Claim 9 ultimately depends from independent claim 1, and therefore it not disclosed or suggested at least in view of its dependency.

Conclusion

For at least the foregoing reasons, applicant respectfully submits that the present application is in condition for allowance, and such action is earnestly solicited. The undersigned hereby authorizes the Commissioner to charge Deposit Account No. 23-0442 for any fee deficiency required to submit this response.

Respectfully submitted,

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